

## **REMARKS**

### **I. Status of Claims**

After the above amendments, claims 1-28 are pending. Claims 1 and 26 are independent. This amendment addresses each point of rejection raised by the Examiner. Claims 26 -28 are new. Favorable reconsideration is respectfully requested.

### **II. Allowable Subject Matter**

Claims 5-7, 10-14, 20 and 22 are allowable over the art of record but are objected to for depending on a rejected base claim. The Examiner has indicated that although claims 5-7, 10-14, 20 and 22 have been objected to, these claims would be allowable if written in independent form. Applicant requests that the Examiner hold rewriting claims 5-7, 10-14, 20 and 22 in abeyance until the submitted arguments for the patentability of claim 1 has been reconsidered.

### **III. Rejection of claims 1 and 23-25 under 35 U.S.C. §102(b) as being anticipated by Shibata et al. (U.S. Pub No.: 2001/0004269, hereinafter "Shibata")**

Claim 1 stands rejected under 35 U.S.C. § 102 as being anticipated by Shibata. Applicant respectfully traverses this rejection with respect to independent claim 1, which discloses a sensing unit disposed on at least one of the hinge unit and the fixing bracket to sense the relative rotational range of the hinge unit with respect to the fixing bracket.

The Examiner asserted that Shibata discloses a sensing unit. However, the sensing unit of independent claim 1 and the axial unit state sensor of Shibata sense the range of different components. In an exemplary embodiment of the present invention, the sensing unit senses the relative rotational range of the hinge unit with respect to the fixing bracket. By contrast, the axial unit state sensor 55 of Shibata detects the position or direction of the main unit 10 and the flip unit 20 (*see* para. 0209, Shibata). Shibata discloses an axial unit state sensor 55 that makes up the internal structure of the portable terminal (*see* Fig. 13, Shibata). The axial unit state sensor 55 of Shibata is not disposed on the shutting axis 31 or any structure that may house rotation axis 32. Further, the axial unit state sensor 55 of the portable terminal detects whether the main unit 10 and the flip unit 20 are inwardly closed in an unused state to determine whether

the power supply should be cut (see para. 0243, Shibata). Nowhere, does Shibata discuss a sensing unit disposed on rotation axis housing or the fixing bracket to sense their relative rotational range with respect to each other. The main unit 10 and the flip unit 20 of Shibata do not correspond to the hinge unit and the fixing bracket of claim 1.

Therefore, Shibata is deficient with respect to the sensing unit that senses the relative rotational range of the hinge unit with respect to the fixing bracket and Applicant respectfully requests the Examiner to withdraw the rejection of independent claim 1.

Applicant respectfully submits that Shibata fails to teach or suggest all of the claim limitations as set forth in the present invention. Since claims 2-25 depend from claim 1, and since Shibata does not disclose all of the limitations of claim 1, Applicant submits that claims 2-25 are patentable at least by virtue of their dependency from claim 1. Accordingly, Applicant respectfully requests that the rejections of claims 1-25 under 35 U.S.C. § 102(e) be reconsidered and withdrawn.

**IV. Rejection of claims 1-4 and 8-9 under 35 U.S.C. §102(b) as being anticipated by Takagi et al. (U.S. 6,226,448 B1, hereinafter "Takagi")**

Claim 1 stands rejected under 35 U.S.C. § 102 as being anticipated by Takagi. Applicant respectfully traverses this rejection with respect to independent claim 1, which discloses a sensing unit disposed on at least one of the hinge unit and the fixing bracket to sense the relative rotational range of the hinge unit with respect to the fixing bracket.

The Examiner asserted that the flexible substrate 317 of Takagi acts as a sensing unit disposed in the fixing bracket that senses the relative rotational range of the hinge unit with respect to the fixing bracket because the hinge unit can only turn as much as is allowed by the flexible substrate 317. However, the sensing unit of claim 1 **senses relative rotational range** and does not limit the rotational range of the hinge unit or the fixing bracket. The examiner is mistaken in attempting to correlate the substrate 317 of Takagi to the sensing unit of claim 1. The substrate of Takagi merely **serves as a connecting means** (see col. 11, ln. 10-20, Takagi). The substrate does not sense relative rotational range of the hinge unit with respect to the fixing

bracket. Therefore, Takagi is deficient with respect to receiving information from the host and Applicant respectfully requests the Examiner to withdraw the rejection of independent claim 1.

Applicant respectfully submits that Takagi fails to teach or suggest all of the claim limitations as set forth in the present invention. Since claims 2-4 and 8-9 depend from claim 1, and since Takagi does not disclose all of the limitations of claim 1, Applicant submits that claims 2-4 and 8-9 are patentable at least by virtue of their dependency from claim 1. Accordingly, Applicant respectfully requests that the rejections of claims 1-4 and 8-9 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

**V. Rejection of claim 4 under 35 U.S.C. §103(a) as being unpatentable over Shibata**

The Examiner has rejected claim 4 as being unpatentable over Shibata. The Examiner admits that Shibata does not teach a shaft hole for receiving a shaft member. However, with reference to the above arguments and because Shibata does not teach a sensing unit that senses the relative rotational range of the hinge unit with respect to the fixing bracket, allowance of claim 4 is respectfully requested.

**VI. Rejection of claims 15-19 and 21 under 35 U.S.C. §103(a) as being unpatentable over Takagi and further in view of Ichiyoshi et al. (U.S. 5,043,822, hereinafter "Ichiyoshi")**

The Examiner has rejected claims 15-19 and 21 as being unpatentable over Takagi in view of Ichiyoshi. Ichiyoshi is cited for teaching a click force providing unit disposed between the fixing bracket and the contact plate for providing a predetermined indication at predetermined intervals during the rotation of the housing with respect to the body. However, with reference to the above arguments and because Takagi does not teach a sensing unit that senses the relative rotational range of the hinge unit with respect to the fixing bracket, allowance of claims 15-19 and 21 is respectfully requested.

**VII. Conclusion**

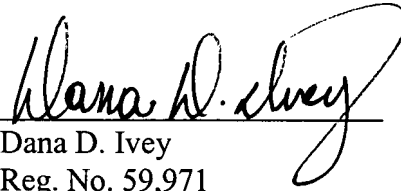
In view of the above, it is believed that the above-identified application is in condition for allowance, and notice to that effect is respectfully requested. Should the Examiner have any

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questions, the Examiner is encouraged to contact the undersigned at the telephone number indicated below.

Respectfully submitted,

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